CLAIMS

- 1. A method of detecting portable objects using a network of N antennae, controlled by a centralised management unit, principally characterised in that it includes the following steps:
- the transmission by the management unit of signals simultaneously to all the antennae,
- the reception by the said unit of a resulting signal comprising response signals from the antennae which have detected a portable object,
- the successive selection of each object detected from this resultant signal, according to a pre-established sequence.
- 2. A detection method according to Claim 1, characterised in that the successive selection of each object is effected by the use of an anti-collision algorithm.
- 3. A detection method according to Claim 1, characterised in that the reception of the resulting signal by the management unit is obtained by the reception of the response signals from the antennae respectively at the input point of the unit reserved for each antenna and adding the said signals.
- 4. A detection method according to Claim 1, characterised in that the reception of a resulting signal by the management unit is obtained by reception of the said resulting signal at an input point of the unit reserved for all the antennae in the system.

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5. A detection method according to any one of the preceding claims, characterised in that the reception of the resulting signal includes a step of identifying the origin of the response signals forming the said resulting signal.

- 6. A detection method according to Claims 3 and 5, characterised in that the identification of a response signal includes a step of storing the identification of the corresponding antenna known by the input point at which the response signal is received.
- A detection\ method according to Claim 6, characterised in that the storage consists of flip-flop positioning а in а logic state and deactivating it when the unit has entered communication with the portable object detected by the corresponding antenna.
- 8. A detection method according to Claims 4 and 5, characterised in that the identification of a response signal includes a step of concatenating the identification of the antenna in the response signal sent by the antenna.
- 9. A system of detecting portable objects including a network of N antennae associated with transmission/reception means and a centralised management unit, characterised in that:
 - the management unit (OG) includes:
- transmission/reception means (ER1) connected to the transmission/reception means of the antennae,

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- the transmission means of the management unit being able to send signals simultaneously to all the antenna,

- and the reception means of the said unit being able to receive the response signals from the antennae which have detected a portable object, in the form of distinct signals for each antenna or a resulting signal, according to the type of connection established between the transmission/reception means of the management unit and the antennae, and
- means (AL) for successively selecting each portable object detected according to a pre-established sequence.
- 10. A detection system according to Claim 9, characterised in that the means for successively selecting each portable object detected in a preestablished sequence includes an anti-collision algorithm.
- 11. A detection system according to Claim 9 or 10, characterised in that the transmission/reception means of the management unit and the transmission/reception means of the antenna connected in point to point mode (I1-IN) by connections of the serial transmission type.
- 12. A detection system according to Claim 9 or 10, characterised in that the transmission/reception means of the management unit include an input point (I) connected to all the antennae by a connection of the serial transmission type.

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13. A detection system according to Claim 11, characterised in that the management unit includes an antenna discriminator (D).

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